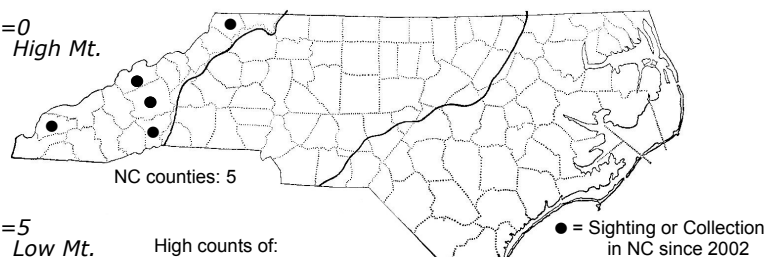
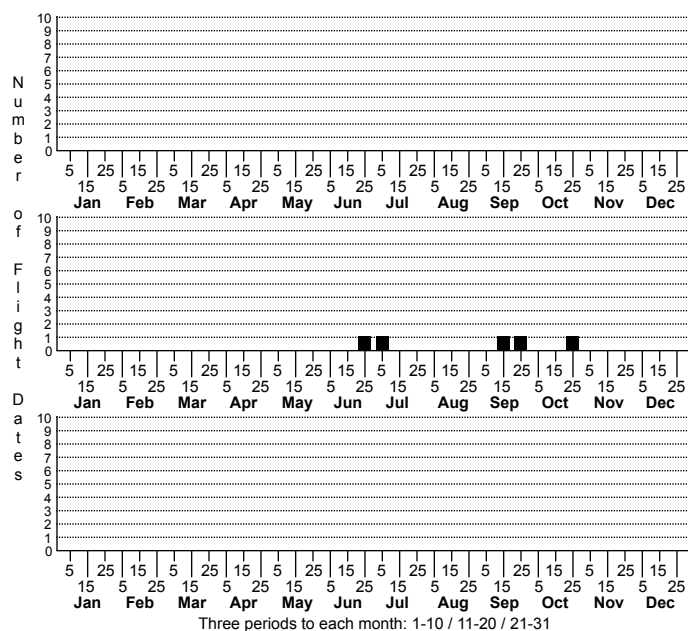


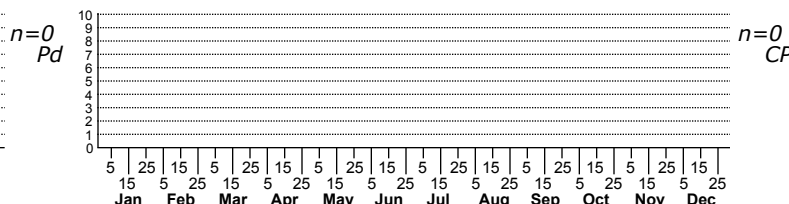
# *Astrotischeria astericola* No common name



High counts of:

40 - Buncombe - 2020-09-01  
20 - Buncombe - 2020-07-17  
20 - Buncombe - 2020-08-27

Status Rank  
NC US NC Global



FAMILY: Tischeriidae SUBFAMILY: TRIBE:

TAXONOMIC\_COMMENTS: *Astrotischeria astericola* is one of 13 described species of *Astrotischeria* in North America. Most species feed on members of the Asteraceae.

FIELD GUIDE DESCRIPTIONS:

ONLINE PHOTOS: MPG, Bugguide, Microleps.org

TECHNICAL DESCRIPTION, ADULTS: Braun 1972, Eiseman 2019.

TECHNICAL DESCRIPTION, IMMATURE STAGES: Braun 1972, Eiseman 2019.

ID COMMENTS: The ground color of the forewings varies from clear bright ochre yellow to brownish ochreous and is sometimes dusted with brownish scales (Braun 1972). A band of larger scales extends diagonally across the wing beginning at the basal third of the costa and is often interrupted. A larger band extends from about two-thirds of the costa diagonally and meets a patch of scales at the tornus. The adults closely resemble several other *Astrotischeria* species and are best identified by their host plants, genitalia, and leaf mine characteristics (Microleps.org). The most convenient way to identify *Astrotischeria* species is by collecting leaf mines from host plants and keeping them until the adults emerge. Morphologically similar species that can be separated by host plants include *A. ambrosiaeella* (a specialist on *Ambrosia trifida*), *A. heliopsisella* (a specialist on *Heliopsis helianthoides* and *Ambrosia trifida*), *A. solidagonifoliella* (a specialist on *Solidago*), and *A. astericola* (a specialist on *Symphytotrichum* and *Eurybia*).

DISTRIBUTION: Braun (1972) noted that this species is a common woodland species that has been long overlooked by lepidopterists. Current locality records are primarily from an area extending from southern Ohio and vicinity to eastern Kentucky, eastern Tennessee and western North Carolina. Eiseman (2019) also reported records from Alberta, Michigan, and Missouri. As of 2020, we have only collected *A. astericola* from four mountain counties, where it is common along forest roads and other settings that support woodland asters. This species is presumably more widely distributed in forested areas of the Blue Ridge that support native woodland asters.

FLIGHT COMMENT: Braun (1972) reported that there are four generations per year in Ohio and vicinity that extend from April through early August. Females in the final generation deposit eggs on basal leaves that overwinter in dried leaves on the host plant. We have observed overwintering larvae in the green basal leaves of *Symphytotrichum* in mid-February in Buncombe Co., and mines with larvae or pupae in late October. As of 2020, our earliest records for occupied mines with non-overwintering larvae is late June.

HABITAT: This species favors mesic to drier forests or forest edges that support native asters.

FOOD: Heartleaf Aster (*Symphytotrichum cordifolium*), Purplestem Aster (*S. puniceum*) and Calico Aster (*S. lateriflorum*) appear to be the most important hosts in North Carolina. These species are widespread in mesic forests and forest edges in the Blue Ridge. Other documented hosts include Thinleaf Late Purple Aster (*S. phlogifolium*), Crooked-stem Aster (*S. prenanthoides*), Short's Aster (*S. shortii*) and Bigleaf Aster (*Eurybia macrophylla*; Braun 1972, Eiseman 2019).

OBSERVATION\_METHODS: The adults do not appear to come to lights or bait traps. They are best obtained by collecting and holding leaves with leaf mines until the adults emerge.

NATURAL HERITAGE PROGRAM RANKS: [GNR][S3S5]

STATE PROTECTION: Has no legal protection, although permits are required to collect it on state parks and other public lands.

COMMENTS: As of 2021, we only have records for four counties in the state, but that is very likely due to lack of effective surveying efforts. One of the primary host plants, *Symphytotrichum cordifolium*, is ranked G5 S4 and the moth may turn out to be even more common and widespread than that since it can feed on other asters as well.